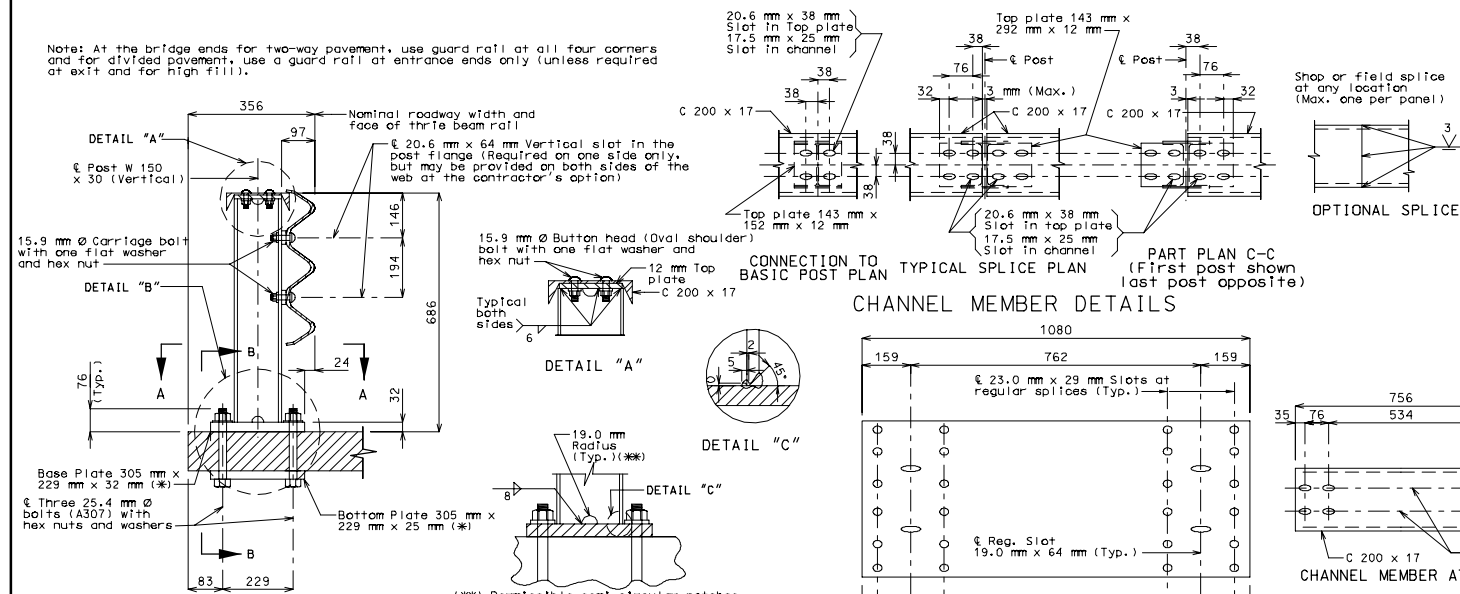
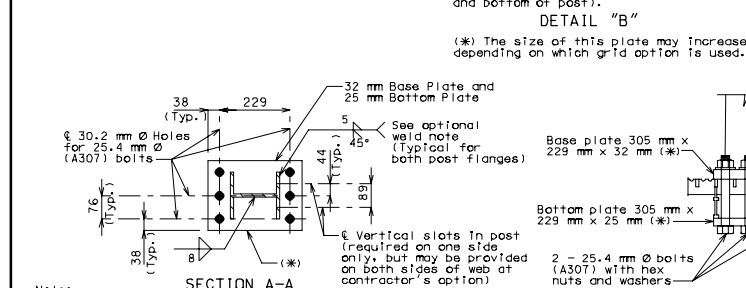


PART SECTION SHOWING THRIE BEAM RAIL

Note: At the bridge ends for two-way pavement, use guard rail at all four corners and for divided pavement, use a guard rail at entrance ends only (unless required at exit and for high fill).



PART SECTION AT RAIL POST

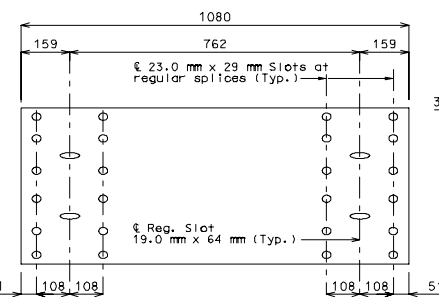


SECTION B-B

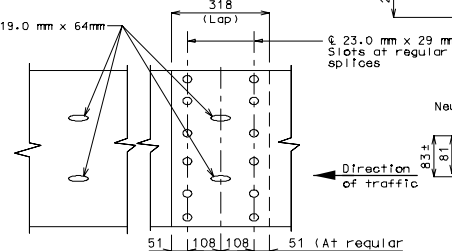
Note: Bottom plate 305 mm x 229 mm x 25 mm (*) to be fabricated from ASTM A709M Grade 345W steel (ungalvanized) and must be welded to two 127 mm floor bars.

Detailed
Checked

CHANNEL MEMBER DETAILS



THRIE BEAM MEMBER AT INT. BENT

RAIL SPLICE DETAILS
(Part Elevation Thrie Beam Member)

Sheet No. of .

GENERAL NOTES:

Design Specifications: AASHTO 1996 and Interims thru 2002.

Panel lengths of channel members shall be attached continuously to a minimum of four posts and a maximum of six posts (except at end bents).

All bolts, nuts, washers and plates are considered as parts of the thrie beam rail for payment.

All steel connecting bolts and fasteners for posts and railing, and all anchor bolts, nuts, washers, top plates & base plates shall be galvanized after fabrication. For protective coating and material requirement of steel railing, see Section 1040 of the Missouri Standard Specifications.

Rail posts shall be set perpendicular to roadway profile grade and vertically in cross section, and aligned according to Section 713 of the Missouri Standard Specifications, except that the rail posts shall be aligned by the use of shims so that in the final adjustment no part shall deviate more than 25 mm from true horizontal alignment. The shims shall be 75 mm x 45 mm and placed between the post and the thrie beam rail. The thickness of the shims shall be determined by the contractor and verified by the engineer before ordering material for this work.

At the expansion slots in the thrie beam rails and channels, tighten bolts, back off one-half turn and burr threads.

At the thrie beam connection to posts on wings, tighten bolts, back off one-half turn and burr threads.

Minimum length of thrie beam sections is equal to one post space.

Use 15.9 mm diameter button head, oval shoulder bolts with hex nuts at all slots. (Thickness of hex nuts = 10 mm min.)

Special drilling of the thrie beam may be required at the splices. (All drilling details are to be shown on the shop drawings.)

Thrie beam guard rail on the bridge shall be made of steel and shall be 2.7 mm (12 gage).

Posts, top plates, base plates, channels and channel splice plates shall be fabricated from ASTM A709M Grade 250 steel and galvanized.

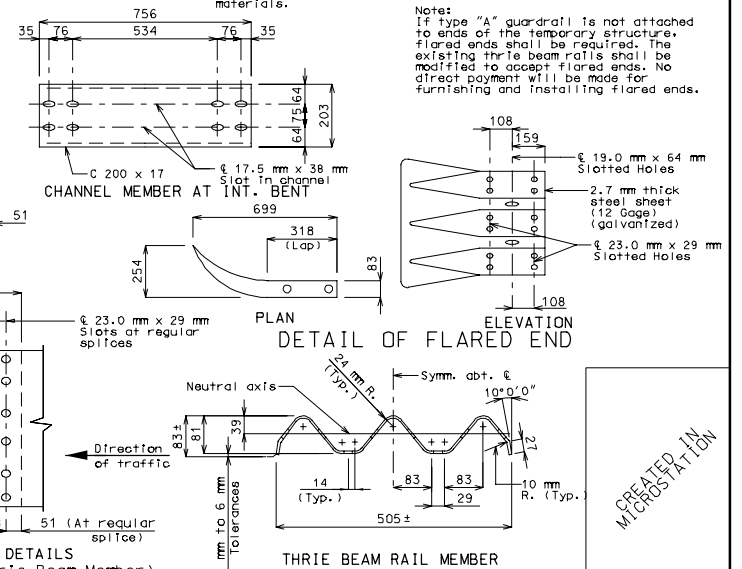
Threaded rods grade A321 with 2 hex nuts and washers may be substituted for the A307 anchor bolts.

Washers shall be used at all post bolts (between the bolt head and beam). They shall be rectangular in shape (75 mm x 45 mm x 5 mm min.) and flat with a 18 mm x 25 mm slot, or when necessary of such design as to fit the contour of the beam. (Use a 75 mm x 45 mm x 16 mm rectangular washer between the post and the thrie beam rail.)

Fabrication of structural steel shall be in accordance with Section 712 of the Missouri Standard Specifications.

Contractor shall verify all dimensions in field before ordering materials.

Note: If type "A" guardrail is not attached to ends of the temporary structure, flared ends shall be required. The existing thrie beam rails shall be modified to accept flared ends. No direct payment will be made for furnishing and installing flared ends.

PLAN
DETAIL OF FLARED END

THRIE BEAM RAIL MEMBER

COUNTY

TEM 4M

CREATED IN
MICROSTATION